

Lexical divergence in monolingual and bilingual language development

Anne White¹,
Barbara C. Malt²,
Steven Verheyen³,
& Gert Storms¹

¹ Laboratory for Experimental Psychology, KU Leuven

² Department of Psychology, Lehigh University

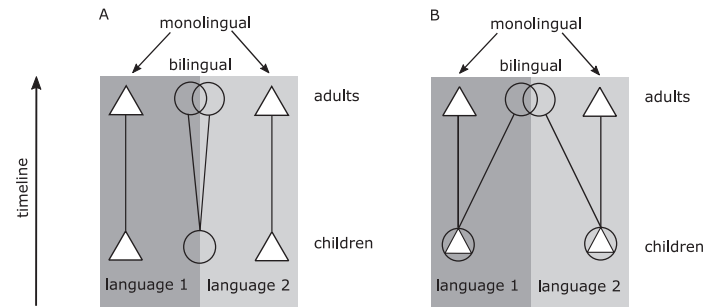
³ Centre for Language and Education, KU Leuven



KU LEUVEN

Introduction

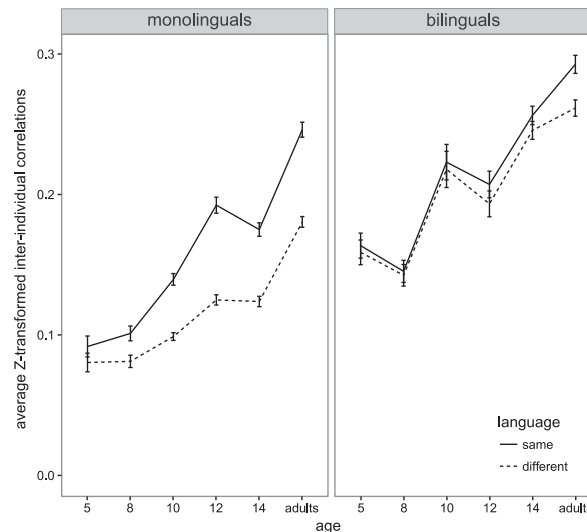
The bilingual lexicon is not fully monolingual-like in either language: the adult bilingual lexicon shows convergence of naming patterns for common household objects (Ameel, Storms, Malt, & Sloman, 2005; White, Malt, & Storms, 2017). Storms and colleagues (2015) proposed two hypotheses concerning the developmental trajectory of naming of common household objects in Dutch-French bilingual children: a decreasing convergence (A) and an increasing convergence (B)



Results

The *rising trend* reflects an increased agreement in noun usage among individuals across ages.

The *separation between lines* indicates greater difference between the naming patterns of the two languages, and thus divergence between the two naming patterns. There is a remarkable correspondence at younger ages, both in the monolingual and bilingual group. Over the course of development the naming patterns of both demonstrate increasing divergence. However bilingual children start diverging their naming patterns at a later age and never to the same extent as monolinguals do.



Method

Six age groups: 5, 8, 10, 12, 14 and adults

Free naming of common household containers by

French-speaking monolinguals

Dutch-speaking monolinguals

French-Dutch bilinguals (performed the task twice)

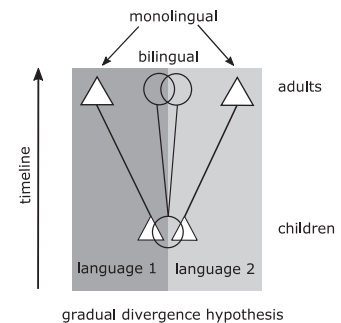


Conclusion

Both monolingual and bilingual children evolve slowly toward increased conventionality in their use of common nouns. Notably, the level of agreement for even 14 year olds remains below the adult level, underscoring the extended noun learning trajectory in both groups.

Both monolingual and bilingual children develop a more language specific naming pattern over age. However, bilingual children start learning the language specificities of the naming pattern at a later age and never differentiate between the two languages to the extent monolinguals do.

Neither the increasing convergence, nor the decreasing convergence hypothesis can be confirmed. We propose a gradual divergence hypothesis instead, applying to the developmental pattern of both monolingual and bilingual children.



References

- Ameel, E., Storms, G., Malt, B. C., and Sloman, S. A. (2005). How bilinguals solve the naming problem. *Journal of Memory and Language*, 53, 60-80. doi:10.1016/j.jml.2005.02.004
- Storms, G., Ameel, E., and Malt, B. C. (2015). Development of cross-language lexical influence. *International Journal of Bilingual Education and Bilingualism*, 18, 529-547. doi:10.1080/13670050.2015.1027142
- White, A., Malt, B.C., & Storms, G. (2017). Convergence in the bilingual lexicon: a pre-registered replication of previous studies. *Frontiers in Psychology*, 7 (1203). doi: 10.3389/fpsyg.2016.02081